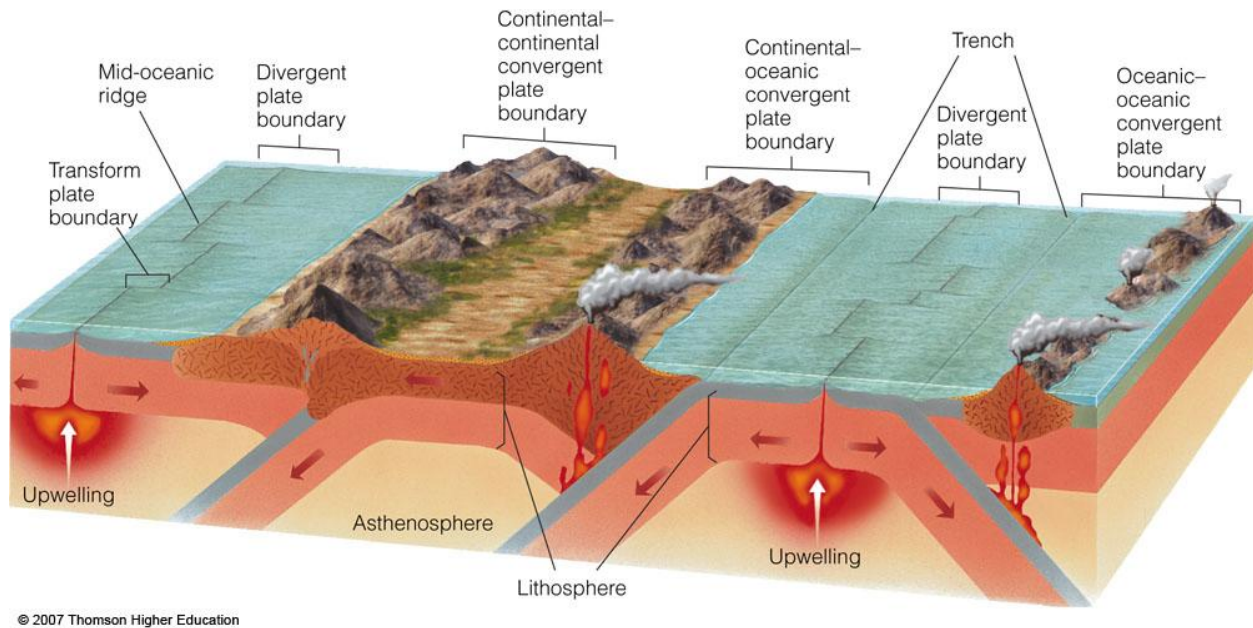


The Walker School – Science Department – Geology  
**Modeling Clay Activity: Plate Tectonics**



**Directions:** Students are to use modeling clay to construct a 3D representation of tectonic activity along a particular plate boundary. Students may elect to do this activity for a convergent, divergent or transform fault.

**Equipment Needed:**

- Internet (to do research on a particular plate boundary)
- Google Earth (to look at plate boundaries)
- Molding Clay (5 colors)
- Digital Camera (to document stages of construction)

**Research:** Students should first spend some time choosing a particular location and researching information about its geologic history online. Students will write down specific information for their chosen plate boundary and include it in the model.

**Acceptable Plate Types:**

- Convergent Plate
- Divergent Plate
- Transform Fault

**Acceptable Plate Boundary Locations:**

- Mid Atlantic Ridge, as it converges Iceland
- Marianas Trench
- San Andres Fault
- Plates that are creating the Himalayan Mountains
- Plates that are creating the Andes

**Model:** The model should be constructed in cross section, so that the observer can see what activity is going on above ground and below the surface. Because the modeling clay comes in different colors, the students should provide a key. The student may do this by making labels and attaching them to the model with pins or by creating a colored key on paper and putting it with the model.

**Class Time Allotted:** 1 period

**Deliverable:** Students are to upload their information onto a PowerPoint slide (picture and talking points) and post it to the school's class management system (First Class). In their presentation, students should be able to 1) point out the location and type of feature (1 point) 2) describe the general geologic activity taking place (2 points), 3) identify specific geological aspects of the feature from their online research (2 points). **Total Points:** 15 points